
ENERGY & SBA Innovation Clusters

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Small Business Energy Innovation

- **WHY**
 - Environmental Benefit
 - Cost Savings
 - Operational Imperative
- **SMALL BUSINESS ADVANTAGE**
 - Agile / Nimble / Responsive / **INNOVATIVE!**
- **CHALLENGE**
 - Find / Facilitate / Commercialize / Connect

“CLUSTERS”



What is a cluster?

- Concentrations of interconnected companies, specialized suppliers, service providers and associated institutions in an industry
- Usually have a central cluster “conciierge” or administrator that manages the cluster and fosters linkages and participation

- Small Businesses
- Colleges
- Entrepreneurs
- Lenders
- Non-profits
- Government Agencies
- Procurement Assistance
- Consultants

- Large Contractors
- Universities
- Investors
- Trade Associations
- Business Assistance
- Other Clusters
- For Profits
- Community Leadership



SBA Advanced Defense Technology Clusters

- Match Small Business innovation with DoD technology requirements.
- Vet Small Business's technology, determine if it is ahead of or behind DoD innovation.
- Save Small Businesses time & resources by ensuring product viability in DoD market place.



SBA Advanced Defense Technology Clusters

- ADT Clusters effectively evaluate small business innovation & link promising technology and ideas with right contacts.

FILTERING THE UNIVERSE!

- ADT clusters can minimize expenditure of government and private sector resources on technology, innovations, and concepts of little value to DoD and unlikely commercial success.

“The Valley of Death”



SBA Advanced Defense Technology Clusters

- Application of Innovation
 - “Operationalizing” Technology!
 - Deep knowledge & understanding of military (or other agency) requirements and operations.
- Team Building
 - Part - - - Component - - - System - - - Product
 - Capacity & Capability for Integration?
 - Support: Capital, Credit, Counseling, Contracting

“COMMERCIALIZING”



Cluster Concept





Jobs Accelerator - Federal Collaboration Clusters
 Economic Development Agency
 Employment and Training Agency
 Small Business Administration

- 14 ME - GreenME Renewable Energy Industry Cluster
- 15 NY - Finger Lakes Food Processing Cluster Initiative *Food Processing Cluster*
- 16 NY - New York Renewable Energy Cluster *Renewable Energy*
- 17 PA - Southwestern Pennsylvania Revitalization *Energy; Health Care*
- 18 OH - Northeast Ohio Speed-To-Market Accelerator *Energy; Flexible Electronics*
- 19 MI - Southeast Michigan Advanced Energy Storage Systems Initiative *Advanced Energy Storage Systems*
- 20 TN - Advanced Composites Employment Accelerator *Advanced Composites with Focus on Low-Cost Carbon Fiber Technology*
- 21 GA - Atlanta Health Information Technology Cluster *Health Information Technology*
- 22 FL - Space Coast Clean Energy Jobs Accelerator *Clean Energy*
- 23 WI - Milwaukee Regional Water Accelerator Project *Water*
- 24 IL - Rockford Area Aerospace Cluster Jobs and Innovation Accelerator *Aerospace*
- 25 MO - St. Louis Bioscience Jobs and Innovation Accelerator Project *Bioscience*
- 26 MN - Minnesota's Mining Cluster – The Next Generation of Innovation and Diversification to Grow America *Energy*
- 27 MO – Kansas City Regional Jobs Accelerator *Advanced Manufacturing and Information Technology*
- 28 AR - Launching the ARK: Acceleration, Resources, Knowledge *Information Technology*
- 29 KS - Center for Innovation and Enterprise Engagement *Advanced materials*
- 30 ND - Upper Missouri Tribal Environmental Risk Mitigation Project *Environmental Risk Mitigation*
- 31 WA - Washington Interactive Media Accelerator - *Interactive Media*
- 32 OR - Portland Regional Clean Tech Advance Initiative *Clean Tech*
- 33 CA - San Diego-Imperial Valley Renewable Energy Generation Training and Demonstration Center *Renewable Energy*

Initial Clusters

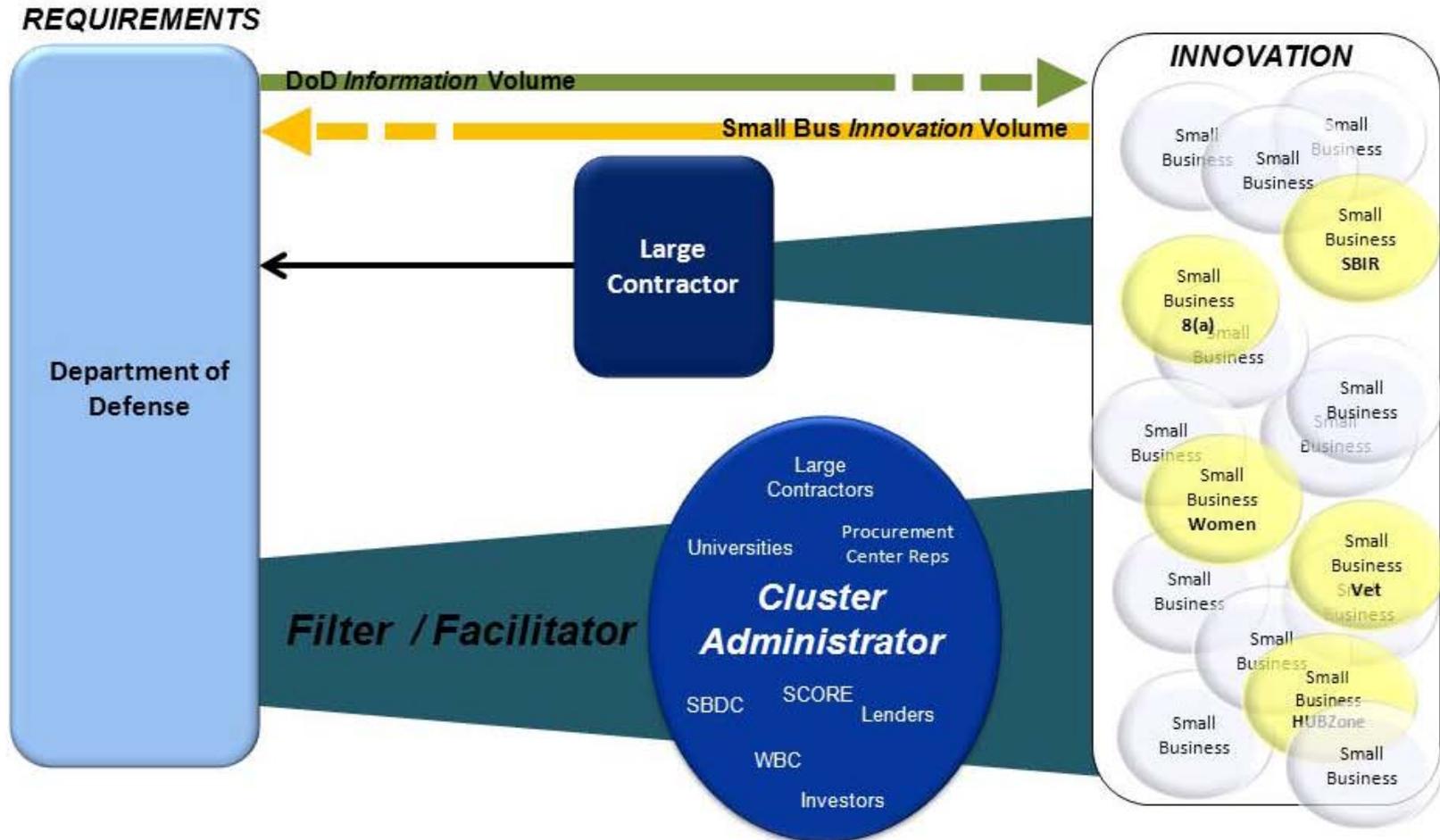
Small Business Administration together with...

- 1 PA - Greater Philadelphia Innovation Energy-Efficient Buildings (EDA, NIST, DOE,)
- 2 FL - Space Coast Space Shuttle Shutdown Transition (EDA, NASA, DOL)
- 3 OH - South West Ohio Water Cluster *Water Research (EPA)*

SBA's Pilot Contract-Based Clusters

- 4 CA - Agriculture Innovation Cluster – Project 17 Ag Tech *Agriculture Innovation*
- 5 NC - Carolinas' Nuclear Cluster *Nuclear energy technology and components*
- 6 CN - Northeast Electrochemical Energy Storage *Fuel cell and hydrogen fueling systems*
- 7 MS - Enterprise for Innovative Geospatial Solutions *Geospatial technology*
- 8 IL - Illinois Smart Grid Regional Innovation Cluster *Smart grid / efficient energy*
- 9 OH - NorTech Flexmatters *Flexible electronics*
- 10 MI - Upper Michigan Green Aviation Coalition *Green aviation*
- 11 MN- Defense Alliance of Minnesota *Advanced power and energy (DoD Focused)*
- 12 CA- San Diego Advanced Defense Cluster *Autonomous systems and cyber security (DoD Focused)*
- 13 AL - Huntsville Advanced Defense Technology Initiative *Aero-space technology (DoD Focused)*

Clusters Connect Innovation to DOD Requirements



Small Business Energy Assistance

- Energy Assistance for Small Businesses:
 - In last three years funded \$2.5M in grants to Small Business Development Centers for helping businesses that develop and commercialize clean energy technology
- Helping Manufacturers and Businesses adopt Green Practices with DoC, DoE, DoL, and EPA
 - E3 (Economy / Energy / Environment) Pilot Program
- Greater Philadelphia Innovation Cluster (GPIC) for Energy-Efficient Buildings with DoE / DoC EDA
 - Small Business Commercialization Acceleration Program (CAP)



Small Business Energy Assistance

- Accelerate “Accelerators” – strengthening networks
 - <http://www.sba.gov/community/blogs/official-sba-news-and-views/open-business/starting-business-high-growth-industry-nee>
- Investments in Clean Energy Businesses
 - [Impact Investment Initiative](#)
 - <http://www.sba.gov/content/small-business-investment-company-sbic-impact-investment-initiative>
 - [Startup America](#)
 - <http://www.whitehouse.gov/economy/business/startup-america>
- One-Stop Destination for Green Business Opportunities:

“GREEN.SBA.GOV”



SBA Cluster Information

Website addresses for ADT Clusters:

- www.powerfordefense.com Minnesota Power & Energy
- www.vcsi.org (Von Braun Center for Science & Innovation – Huntsville, AL) Click on ADT link on bottom of VCSI homepage for specific ADT info.
- www.ccatsandiego.org (San Diego State University Research Foundation) - - - also interesting SDADT video at:
http://www.ccatsandiego.org/CWID2011_SDADT.aspx



SBA Cluster Information

Additional Cluster Information

www.sba.gov/clusters

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